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07/13/2009

EXAMINER

GLASS, ERICK DAVID

ART UNIT

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2837

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,518	Applicant(s) LAIS, LOTHAR	
	Examiner Erick Glass	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 19-24 is/are rejected.
- 7) ☒ Claim(s) 17 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 11, 12, 15, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Andersen (US 5,773,943).

With respect to claim 1, Andersen teaches a drive device for passage barriers (abstract) or thoroughfare barriers and door or gate drives, having a brushless DC servo motor, characterized in that the DC servo motor (fig. 2, 11) has an associated servo controller (fig. 9, 50) and the output shaft (fig. 3, 8) of the DC servo motor is connected directly to the drive shaft (fig. 3, 4) of the barrier element.

With respect to claim 2, Andersen teaches a compact complete control device which comprises the servo controller (fig. 9, 50) and a logic section (fig. 9, 52) and a housing (fig. 3, 18), and which serves to control (column 7, lines 5-15) the motor as a function of signals.

With respect to claim 11, Andersen teaches in that a linkage (fig. 3, 14) can be interconnected between the servo motor and the barrier element which is to be moved (column 5, lines 45-62).

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With respect to claim 12, Andersen teaches in that a step-down gear mechanism (fig. 3, 9) and a linkage (fig. 3, 14) can be interconnected between the servo motor and the element which is to be moved (column 5, lines 45-62).

With respect to claim 15, Andersen teaches drive device for passage barriers or thoroughfare barriers and door or gate drives, comprising a brushless DC servo motor (fig. 2, 11); an output shaft (fig. 3, 8) formed at the brushless DC servo motor and having an axis (fig. 3, dash line down 4 and 8); a barrier element (abstract); a drive shaft (fig. 3, 4) formed at the barrier element and having an axis (fig. 3, dash line down 4 and 8), wherein the output shaft of the brushless DC servo motor is solidly attached to the drive shaft formed at the barrier element (fig. 1, 1) and wherein the axis of the output shaft and the axis of the of the drive shaft coincide (fig. 3); a servo controller (fig. 9, 50) connected to the brushless DC servo motor.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-10, 13, 14, and 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen (US 5,773,943) in view of Becker (US 5,245,258).

With respect to claim 3, Andersen does not teach characterized in that the logic section is designed as a pluggable logic circuit board. Becker teaches in that the logic

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section is designed as a pluggable logic (fig. 2, 5) circuit board. It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a pluggable logic board to the motor control system of Anderson for the advantage of to accomplish an easily installed assembly which can be programmed as desired, as taught by Becker (column 5, lines 49-55; column 7, lines 34-52).

With respect to claim 4, Andersen does not teach that different logic circuit boards can be plug-connected, different movement profiles and programs which are directed at various applications are prespecified on said logic circuit boards, and said logic circuit boards have different numbers of inputs and outputs and different operator control and display elements, depending on requirements. Becker teaches different logic circuit boards can be plug-connected, different movement profiles and programs which are directed at various applications are prespecified on said logic circuit boards, and said logic circuit boards have different numbers of inputs and outputs and different operator control and display elements, depending on requirements (column 5, lines 49-55; column 7, lines 46-52). It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a pluggable logic board that has the advantage of being able to be programmed as desired, as taught by Becker (column 5, lines 49-55).

With respect to claim 5 and 19, Andersen does not teach a transmitter system which is integrated in the motor and supplies the required control signals. Becker teaches teach a transmitter system (fig. 2, 4) which is integrated in the motor and supplies the required control signals (column 5, lines 49-55). It would have been

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obvious to one having ordinary skill in the art at the time of the invention to incorporate a pluggable logic board/control system that has the advantage of being able to be programmed as desired, as taught by Becker (column 5, lines 49-55).

With respect to claim 6, and 20, Andersen and Becker do not teach in that the motor mount is formed as a fixed mount on the side of the transmitter system. Becker discloses the claimed invention except for the fixed mount. It would have been obvious to one having ordinary skill in the art at the time the invention was made to made the circuit assembly fixed, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

With respect to claim 7 and 21, Andersen does not teach in that the transmitter system is connected to the motor plate by means of plug connection or clamping. Becker teaches the transmitter system is connected to the motor plate (fig. 2, 26) by means of plug connection (fig. 2, 11, 12; column 6, lines 45-51) or clamping. It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a pluggable logic board that has the advantage of being able to be programmed as desired, as taught by Becker (column 5, lines 49-55).

With respect to claim 8 and 22, Andersen does not teach in that the plug connection is designed to be secure against polarity reversal and is provided with a locking means. Becker teaches the plug connection is designed to be secure against polarity reversal and is provided with a locking means (column 7, lines 46-52). It would

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have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a pluggable logic board that has the advantage of being able to be programmed as desired such as locking means, as taught by Becker (column 5, lines 49-55).

With respect to claim 9 and 23, Anderson does not teach a commutation and position control in the motor are performed by means of a magnetoresistive sensor. Becker teaches a commutation and position control (column 6, lines 25-40) in the motor are performed by means of a magnetoresistive sensor (column 6, lines 25-27; "inductive measuring device"). It would have been obvious to one having ordinary skill in the art at the time of the invention to include a sensor to provide the advantage of getting feedback of speed/position signals, as taught by Becker.

With respect to claim 10, Andersen does not teach commutation and position control in the motor are performed by means of resolvers or encoders or Hall sensors. Becker teaches a commutation and position control (column 6, lines 25-40) in the motor are performed by means of resolvers or encoders or Hall sensors (fig. 2, 31, 32).

With respect to claim 13, Andersen does not teach in that the inputs and outputs are separate from the actual motor control system/logic circuit board and designed as an independent module. Becker teaches the inputs and outputs are separate from the actual motor control system (fig. 2, 21, 22)/logic circuit board and designed as an independent module (fig. 2, 6). It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a pluggable logic board with various

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input/outputs that has the advantage of being able to be programmed as desired, as taught by Becker (column 5, lines 49-55).

With respect to claim 14, Andersen does not teach in that the inputs and outputs can be connected by a pluggable bus connection or a pluggable, multicore cable. Becker teaches the inputs and outputs can be connected by a pluggable bus connection or a pluggable, multicore cable (column 7, lines 10-52). It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a pluggable logic board with multiple pins/cables/control signals that has the advantage of being able to be programmed, as taught by Becker (column 5, lines 49-55).

With respect to claim 16, Andersen teaches a logic section (fig. 9, 52) connected to the servo controller; a housing (fig. 3, 18) surrounding the servo controller and the logic section, wherein the servo controller, the logic section, and the housing form a compact complete control device which serves to control the brushless DC servo motor as a function of signals (column 5, lines 45-62). Anderson does not teach wherein the servo controller is furnished as a circuit board. Becker teaches a circuit board (fig. 2, 6). It would have been obvious to one having ordinary skill in the art at the time of the invention to use a circuit board with plug in capabilities that has the advantage of being able to be programmed as desired, as taught by Becker (column 5, lines 49-55).

Response to Arguments

Applicant's arguments filed 3/19/09 have been fully considered but they are not persuasive. Applicant's first argument is that the revolving door of Anderson is not a

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drive device for passage barrier. The examiner disagrees, claim 1 reads “passage barrier or thoroughfare barrier and door or gate drive”, which Anderson invention teaches. The applicant is arguing a narrower description than is present.

Applicant's second argument is that Anderson does not teach the output shaft of the motor connected directly to the drive shaft of the barrier. The examiner disagrees, (column 5, lines 60-62) the output shaft of the motor (fig. 3, 8) is directly connected to the drive shaft of the barrier (fig. 3, 4). Anderson invention does contain a worm gear which is connected to the motor, not between the output shaft and barrier shaft.

Applicant's third argument is that the servo controller in claim 2 has a different function than Anderson's controller. The claim language does not read further in detail of the functionality of the controller. Anderson controller reads on the present claim language.

Applicant's fourth argument is against a typographical error in claim 12. The linkage connection is labeled correctly in claim 11, as fig. 3, 14 but was mislabeled in claim 12.

In response to applicant's fifth argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re*

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Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both are electrically driven barriers containing motors, and similar hardware control setups.

Applicant's sixth argument is that it would have not been obvious in view of the Becker reference. Again the examiner has different reason for combining which have been included and are in the same field of endeavor.

With respect to claim 8, the applicant argues that the locking means of Becker is different than that of the reference. Again the applicant is arguing about something that is not present in the claim language.

With respect to claim 13, the applicant argues that the rejection is not understood. The claim language is difficult to understand of what is separate from each other. The examiner interpreted the claim to mean the input and output shafts are separate from the motor control system and logic circuit board which is an independent module.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Glass whose telephone number is (571)272-8395. The examiner can normally be reached on 9-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on 571-272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BENTSU RO/
Primary Examiner, Art Unit 2837

/Erick Glass/
Examiner, Art Unit 2837